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## SEPA Green Buildings on **Brownfields Pilot**

Baltimore, MD

Office of Brownfields Cleanup and Redevelopment

Quick Reference Fact Sheet

## National Aquarium Center for Aquatic Life and Conservation

To meet the needs of a rapidly growing collection of current and future exhibits, as well as expanding programs in research, husbandry, and conservation, the National Aquarium in Baltimore is building a new Center for Aquatic Life and Conservation (CALC) on a seven-acre brownfield located near major highways and bus routes in Baltimore, Maryland. To assist in their goal of obtaining a LEED Silver or Gold rating, the Aquarium used their Green Buildings on Brownfields pilot support to retain the services of a Baltimore architect who specializes in green building design.

The expert architect worked with the Aquarium and the project's technical advisory committee to develop a detailed green building plan that outlined not only the space needs of the programs to be housed, but also clear goals and strategies for green building and site design. As stated in the final plan, "[e]cologically intelligent design treats the building and its site as a system. The design team will look into detail at water, air, energy, transportation, materials, and habitat flows to, from, and within the site. The design will emphasize connections and synergies among interrelated natural systems and building technologies."

The green building plan includes strategies for a number of design elements, including:

- Water and wastewater conservation and management. Rainwater and greywater will be investigated for use in toilet flushing, a cooling tower, floor washing, and irrigation.
- Indoor environment and HVAC systems. The design team will focus on the building as an integrated system to reduce energy consumption for heating and cooling.
- Energy efficiency and renewable energy. Passive solar and other energy conserving design elements will be integrated into the architecture.
- Environmentally friendly building materials. The design will utilize environmentally friendly building materials, including recyclable plastic pipes instead of PVC pipes.

The CALC will be a state-of-the-art facility with public access to showcase its green design while also achieving its mission of aquatic life conservation.



Artist's conception of one proposed design for the National Aquarium's future Center for Aquatic Life and Conservation.